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This document, based on 3-year summary reports submitted by the participating schools, summarizes programs supported by the Manpower Research Institutional Grant Program under authority of Title I of the Manpower Development and Training Act of 1962, as amended. In June 1966, the first grants were awarded to seven colleges and universities. The approach of each institution to the Act's major emphasis on research and training is illustrated by publication schedules and substantive focus: 178 publications and major unpublished reports generated collectively by the seven institutions are listed. The variety of substantive focus was, in part, due to institutional responsiveness to manpower problems peculiar to their particular geographical areas. However, broad manpower issues, such as labor force behavior of special groups and manpower utilization, were also researched. Other facets of the programs included integration of the manpower studies into masters and/or Ph.D. degree programs, involvement of 110 faculty members through an interdisciplinary approach to manpower research, substantial financial support for approximately 150 students participating in the manpower programs, and conferences and symposiums. Detailed information is provided for each area of activity. (CH)

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THE MANPOWER RESEARCH INSTITUTIONAL GRANT PROGRAM:

THE FIRST THREE YEARS

1966–1969

U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

CONTENTS

		Page
I.	INTRODUCTION	1
II.	ADMINISTRATION OF INSTITUTIONAL GRANTS	5
III.	RESEARCH	7
	A. Atlanta University	8
	B. Iowa State University	9
	C. University of Maine	15
	D. Norfolk State College	16
	E. North Carolina State University	17
	F. Oklahoma State University	22
	G. Temple University	25
IV.	TRAINING	29
	A. Degree Programs and Curriculums	29
	B. Faculty Members	31
	C. Financial Support for Students	33
V.	EXTENSION ACTIVITIES	37

I. INTRODUCTION

To create centers for long-range research and training of specialists in the manpower field, the U.S. Department of Labor initiated the Manpower Research Institutional Grant Program under authority of title I of the Manpower Development and Training Act of 1962, as amended. In June 1966, the first grants (approximately $75,000 each per year) were awarded to seven colleges and universities: Atlanta University, Iowa State University, University of Maine, Norfolk State College, North Carolina State University at Raleigh, Oklahoma State University, and Temple University. All have graduate programs except Norfolk State College.

The recipients were selected from 43 applicants by members of the National Manpower Advisory Committee's Subcommittee on Research. Criteria for selection included relevance of the applicants' proposals to the objectives of title I of the MDTA and to the applicants' potential for filling the following objectives of the Institutional Grant Program:

1. Research. To stimulate and support systematic, long-range programs of interdisciplinary research on manpower problems; to develop within academic institutions capabilities for providing technical support to local and regional organizations concerned with manpower problems; to improve communications among manpower researchers; and to improve dissemination of research results.

2. Training. To encourage study of manpower problems among students in various disciplines; to develop students' research capabilities; and to introduce manpower courses or curriculums.

In addition, selection was oriented toward smaller schools with good potential for manpower research and training, in response to a presidential memorandum of September 13, 1965, on strengthening academic capabilities for science throughout the country.

Selection was not dependent on the proposed manpower program's attachment to any particular disciplines. Rather, the Institutional Grant Program was intended to bring together the manpower-related disciplines--economics, sociology, social work, psychology, business administration, education, political science, anthropology, and others.

The original grant period extended a minimum of 3 years. After an onsite evaluation of the grantees' programs in the winter of 1968, a committee of experts outside the Department of Labor recommended continuing support at a decreased level for an additional 2 years.

By the end of the 5-year period, they expected the schools' programs to be well enough established to attract support from sources other than the Institutional Grant Program.

The evaluating committee also recommended that program support be extended to other institutions. Given continuing appropriations, the Department of Labor is now reopening the Institutional Grant Program by offering 10 new 4-year grants. It is expected that one recipient school will be selected from each of the Department's regions of the country, as follows:

Region I--Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Region II--New Jersey, New York, the Canal Zone, Puerto Rico, and the Virgin Islands.

Region III--Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

Region IV--Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

Region V--Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

Region VI--Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Region VII--Iowa, Kansas, Missouri, and Nebraska.

Region VIII--Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

Region IX--Arizona, California, Hawaii, Nevada, American Samoa, and the Trust Territories.

Region X--Alaska, Idaho, Oregon, and Washington.

Applications for the new grants must be received by December 1, 1969. Awards will be announced in February 1970, and the grants will become effective in August 1970. 1/

1/ For information on applying for an institutional grant, contact the Director, Office of Manpower Research, U.S. Department of Labor, Washington, D. C. 20210.

This booklet summarizes the institutional grant recipients' programs as they had developed by the end of their first 3 years. Because the Institutional Grant Program was itself new, each school had to pioneer in creating its manpower program. Administrative difficulties and a shortage of specialists in the manpower field initially hindered their development. But by mid-1969, the recipient schools had undertaken significant research projects and created effective programs for training manpower researchers.

This summary of activities is intended to be a guide for new applicants. It illustrates the possibilities available to construct innovative programs suited to the particular strengths and circumstances of their schools.

This booklet, based on 3-year summary reports submitted by participating schools, was prepared by Linda Buss, Office of Manpower Research, Manpower Administration, U.S. Department of Labor, in July 1969.

II. ADMINISTRATION OF INSTITUTIONAL GRANTS

The schools receiving institutional grants (IG's) administered their programs through two basic structures: (1) Newly created centers of manpower activity, either attached to the economics department or school of business administration, or completely independent of departmental organization; or (2) subunits of the economics department, largely lacking in administrative identity. Temple University originally adhered to the latter approach, but is planning to establish an independent "urban manpower institute" to incorporate its IG activities.

In charge of each IG program were a director (a professor in a manpower-related discipline) and occasionally an assistant director and/or department head. Supporting staff usually consisted of a secretary, one or two research assistants, and, as needed, statistical analysts and student workers. Suitable to its widespread activities, Iowa State University built up the most elaborate supporting staff among the seven schools--including an office manager, publications editors, secretary, and three clerks and/or typists.

Only the institutional grant awarded to North Carolina State University covered manpower activities at more than one school--Duke University and the University of North Carolina at Chapel Hill, as well as NCSU. NCSU has administered this grant through an informal but effective system within their department of economics. The department head has had responsibility for staffing, finance, and, ultimately, for the entire manpower program. The IG director has focused more on substantive matters--coordinating research activities among the three schools and among NCSU departments and providing leadership in NCSU's teaching program.

Committees advising the manpower programs were of two principal types: (1) Directors, faculty members, and occasionally professors from manpower-related disciplines, who made policy decisions on manpower activities; and (2) leading area citizens in business, unions, government, colleges, and public schools, who identified local needs which the manpower program might help to meet. One or both of these types of committees were created by five of the recipient schools--Atlanta University, Iowa State University, Norfolk State College, Oklahoma State University, and Temple University.

In administering their grants, the recipient schools expended funds basically for additions of staff and faculty, reductions in faculty teaching loads, student financial assistance, research expenses, and conferences. However, the spending strategy that appeared to have been most productive was the use of IG funds as

"seed money"; that is, to attract funds from other sources. At Iowa State University, for example, expenditures for faculty time released for research, secretarial services, and current expenses were matched by the University. Financial support for many research projects was derived from State, Federal, and local agencies, and funds for one fellowship were attracted from a private corporation.

III. RESEARCH

Manpower research projects at the recipient schools have been conducted by all faculty members and students closely related to the grant program, and by faculty members elsewhere in the university and at other schools. The theses and dissertations of graduate students have often been closely tied in with the research topics under faculty exploration.

During the last 3 years, the schools' research programs have mushroomed beyond the level which would normally be expected from their limited grants. This expansion has resulted from the schools' increasing success in attracting outside research funds by using institutional grant money to carry out pilot studies or develop research designs. In addition, as the results of early projects have been publicized, concerned State or local agencies have often initiated and financed related studies, some of which are executed by manpower center personnel.

Recipient schools' research results have appeared in many different forms. Published materials include books or chapters for books, bulletins and monographs, journal articles and book reviews, reprinted papers delivered at conferences, and legislative testimony. Numerous research reports (such as theses and dissertations) are also available in unpublished form through the manpower centers. (Availability of reports is noted below for each participating school.) Unrecorded verbal presentations of research results were often made to student groups or potential users.

Dissemination of publications and major unpublished reports varied among the participating schools in the degree to which it was systematized. Some schools distributed each report to the faculty and students involved in grant activities and to the persons or groups they judged to be interested in the particular subject. At the other end of the spectrum was Iowa State University, which distributed its publications to the 69 colleges, universities, and associations of higher education cooperating with their program in the six-State Great Plains region and to industrial relations centers and libraries, as well as to groups concerned with the particular report.

Utilization of research has often been highly visible, as when researchers are invited to present legislative testimony or programs are developed in response to a reported need. In other cases, though, research projects have had indirect impact. Because the schools' research programs have been oriented toward real manpower problems, eventual utilization of research results seems assured.

As evidenced in the descriptions that follow, the topics of research at each school receiving an institutional grant varied widely, in part because of their attention to the manpower problems of their particular

areas. However, the frequency with which a number of schools explored a few subject areas--such as health manpower, labor force behavior of special groups, and manpower utilization--reflects their responsiveness to current manpower issues.

A. Atlanta University

Student and faculty research has focused on the manpower problems of the Southeast, with emphasis on Negroes as white-collar workers and as graduates of various manpower training programs. Major regional projects are tracing the relationship between economic growth and employment trends in the Southeast; and Negro versus white perceptions of the availability of employment in the South. (The latter study is being executed under a Manpower Administration grant.)

Completed studies on white-collar employment of Negroes concerned management training programs in two Atlanta discount department stores (with emphasis on barriers to Negro participation) and Negroes as managers of urban programs. Current studies seek to: (1) Develop a manual for private industry's use in recruiting and promoting Negro professionals; and (2) examine the employment patterns of Negroes in Atlanta during the 1960's, particularly in white-collar occupations.

Two projects examined the employment experience of training graduates of Atlanta's MDTA program and Carver Vocational High School, respectively. In progress is a study on the relevance of Neighborhood Youth Corps work experience to enrollees' development of job skills.

Two other studies dealt with job opportunities for Negroes. One explored the implications of providing public assistance to Negro businesses in order to expand employment opportunities for Negro teenagers. The other project explored jobs for Negroes in health occupations.

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Publications and major unpublished reports prepared by faculty and students are listed below. Information on availability of copies may be obtained by writing the Center for Manpower Studies, Atlanta University, Atlanta, Ga. 30314.

Hill, Mary. "The Effectiveness of the Business Education Training Program Sponsored by MDTA in Reducing Unemployment in Atlanta." Master's thesis, 1967.

Kapoor, V. "Economic Development of Georgia in Terms of Employment and Personal Income." Student report, 1967.

Kidder, Dr. Alice. "The Black MBA," Personnel Journal, September 1969.

Kidder, Dr. Alice, and Heffner, James. "The Negro in Southern Management." Paper to be presented at the annual meeting of the Southern Management Association, November 1969.

Kidder, Dr. David, and Kidder, Dr. Alice, "Employment Creation Effects of Negro Business, With Particular Emphasis on Negro Teenage Employment Potential." 1969.

Mayo, Marianne. "Effect of Education on the Employment of Youth in Vine City." Master's thesis, 1968.

Prakash, Prem. "Economic Development of Georgia and Its Implications." Master's thesis, 1969.

Sethi, Manmohon. "Management Training Programs in Discount Department Stores." Master's thesis, 1967.

Trooboff, Dr. Benjamin. "Employment Experiences After MDTA Training." Ph.D. dissertation, Georgia State College, Atlanta, Ga., 1968.

Trooboff, Dr. Benjamin. "Employment Opportunities for Negroes in Health Related Occupations," Journal of Negro Education, Winter 1969.

Trooboff, Dr. Benjamin. "The Participation of Minority Group Members as Managers of Urban Programs," Journal of the American Institute of Regional and Urban Affairs, May 1968.

Walker, Lester. "Employment and Training: A Study of the 1965 Graduates of Carver Vocational High School in Atlanta, Georgia." Master's thesis, 1968.

Wilkerson, Prentice. "A Study on the Neighborhood Youth Corps Program in Atlanta." Student report, 1967.

B. Iowa State University

To maximize its long-run effectiveness, the manpower center's research has centered on six major subject areas, with relevance, whenever possible, to Iowa and the surrounding region. Eventually, the center hopes to establish regional research institutes focusing on each of these areas.

1. Health manpower. A study was completed on nursing as a critical health occupation and the potential of collective bargaining for relieving the shortage of nurses. Another project is examining turnover, absenteeism, and labor force behavior of nurses. A series of studies is being carried out on career choice in the medical field. In cooperation with various private and public health agencies in Iowa, studies are underway on development

of a comprehensive health manpower program for the State, costs of nursing homes in Iowa, and use of subprofessionals in pharmacy.

2. Occupational employment forecasting. The first five in a series of semiannual job vacancy listings in Iowa manufacturing have been published. A study of Iowa's manpower requirements for 1975 has been completed, as well as a projection of skill content and manpower needs in Iowa farming. In addition, a manual was prepared to enable local groups to conduct manpower supply surveys for multicounty areas.

3. Managerial and leadership performance. A continuing study of manager performance has been underway for 3 years. Managerial style has been examined as it affects performance, influences the supervisory style of subordinates, and functions among hospital workers.

4. Collective bargaining and labor laws. A major study is being executed on the shortage of arbitrators and efficient use of their limited supply. As a result of early study findings, the National Academy of Arbitrators is developing approaches to training arbitrators for specific roles.

5. Manpower program evaluation. Findings from a study of on-the-job training and the older worker have been presented before the U.S. Senate Special Committee on Aging. Job training priorities in Iowa are being related to the State's vocational school system under a Manpower Administration dissertation grant. In addition, evaluation of the Governor's program for employment of youth is being executed under a contract with the Iowa Manpower Development Council.

6. Labor force behavior. Studies have been completed on: (1) Modes of withdrawal from the labor force by farmers, small town merchants, professionals, and factory workers age 50 and older (partially financed by the U.S. Department of Health, Education, and Welfare); and (2) the employment readiness of married women among disadvantaged Iowa families in nonmetropolitan areas.

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Publications and major unpublished reports by faculty and students associated with the grant program are listed below. Information on availability of copies may be obtained by writing the Industrial Relations Center, Iowa State University, Ames, Iowa 50010.

Cohen, Harry. "Union-Management Conflict: An Application of the March and Simon Hypotheses," Manpower and Applied Psychology, Winter 1968.

Davey, Harold W. "Present and Future Labor Relations Problems in the Meat Packing Industry," Labor Law Journal, December 1967.

Davey, Harold W. "Restructuring Grievance Arbitration Procedures: Some Modest Proposals," Iowa Law Review, Vol. 54, no. 4, February 1969.

Davey, Harold W. "Union-Management Cooperation Revisited." Business Perspectives, Vol. 4, no. 2, Winter 1968.

Davey, Harold W. The Uses and Misuses of Tripartite Boards in Grievance Arbitration. Washington: Bureau of National Affairs, Inc., 1968. Reprinted by Iowa State University, Industrial Relations Center.

Davis, J. Ronnie, and Palomba, Neil A. "The N.F.O.'s Dilemma," Social Science Review, to be published in 1969.

Davis, J. Ronnie, and Palomba, Neil A. "On the Shifting of the Military Draft as a Progressive Tax-in-Kind," Western Economic Journal, Vol. VI, no. 2, March 1968.

Hawley, Karen. The Economics of Collective Bargaining by Nurses. Ames, Iowa: Iowa State University, Industrial Relations Center, September 1967. Reprinted by Iowa State University Press.

Heitmann, Kenneth H. An Examination of Hired Farm Workers on Iowa Farms. Master's thesis. Ames, Iowa: Iowa State University, Industrial Relations Center, April 1969.

"Human Resources Development," Iowa Business Digest, October 1966. Special issue of four articles prepared jointly by Iowa State Manpower Development Council and the Industrial Relations Center, Iowa State University.

Jakubauskas, Edward B. "Comprehensive Health Manpower Planning: Demonstration of Research-Conference Procedures for Estimating Health Manpower Requirements and in Evaluating Educational and Training Programs for Selected Health Occupations in Non-Metropolitan Areas." Final report submitted to the U.S. Office of Education, May 31,1968.

Jakubauskas, Edward B. "Coordination in Obtaining and Utilizing Manpower Data for Vocational-Technical Educational Planning." Paper delivered at the Summer Research Institute on Manpower Surveys for Vocational-Technical Educational Planning, Storrs, Conn.: University of Connecticut, July 11, 1968.

Jakubauskas, Edward B. "The Economics of Aging." Paper delivered at the First Governor's Conference on the Aging. Des Moines: Iowa Commission on the Aging, Oct. 3, 1967.

Jakubauskas, Edward B. "The Implications of Manpower Supply and Demand upon Vocational-Technical Education in the West North Central States Region." Paper presented at the Conference on the Policy Issues

and Developmental Problems of Post-High School Vocational-Technical Education in Region VI, Ames, Iowa: Nov. 14, 1967. Reprinted in Planning for School District Organization, Lincoln, Neb.: Great Plains School District Organization Project, May 27, 1968.

Jakubauskas, Edward B. "OJT and the Older Worker," Congressional Record. Washington: U.S. Government Printing Office, July 29, 1968.

Jakubauskas, Edward B. "Report on Congressional Activities Affecting the Aging." Proceedings of a Seminar on Serving the Older Worker. Des Moines: Iowa Employment Security Commission, Aug. 7-9, 1968.

Jakubauskas, Edward B. and Baumel, C. Phillip. Human Resources Development. Ames, Iowa: Iowa State University Press, October 1967.

Jakubauskas, Edward B. and Palomba, Neil A. Job Vacancies in Iowa Manufacturing Establishments, March-August 1966. Des Moines: Iowa State Manpower Development Council and Iowa State University, Industrial Relations Center, April 1967.

Jakubauskas, Edward B. and Palomba, Neil A. Job Vacancies in Iowa Manufacturing Establishments, March-August 1967. Ames, Iowa: Iowa State University, Industrial Relations Center, October 1967.

Jakubauskas, Edward B. and Palomba, Neil A. Job Vacancies in Iowa Manufacturing Establishments, September 1967 through February 1968. Ames, Iowa: Iowa State University, Industrial Relations Center, March 1968.

Jakubauskas, Edward B. and Palomba, Neil A. Job Vacancies in Iowa Manufacturing Establishments, March 1968 to August 1968. Ames, Iowa: Iowa State University, Industrial Relations Center, August 1968.

Jakubauskas, Edward B. and Palomba, Neil A. Job Vacancies in Iowa Manufacturing Establishments, September 1968 to February 1969. Ames, Iowa: Iowa State University, Industrial Relations Center, February 1969.

Jakubauskas, Edward B. and Palomba, Neil A. "Manpower Economics." Reading, Mass.: Addison-Wesley Publishing Co., tentatively scheduled for publication in 1970.

Jakubauskas, Edward B. and Palomba, Neil A. "Proceedings: Summer Manpower Research Institute, 1968." In process.

Jakubauskas, Edward B. and Palomba, Neil A. "Relocation of Farm Workers from Mississippi to Iowa," Proceedings of the Twenty-Second Spring Meeting of the Industrial Relations Research Association. Des Moines: May 2, 1969.

Jakubauskas, Edward B. and Ropes, John M. The Iowa State Manpower Development Council: An Experiment in Human Resource Program Coordination. Ames, Iowa: Iowa State University, Industrial Relations Center, January 1969.

Jakubauskas, Edward B. and Taylor, Vienna. "OJT and the Older Worker," Industrial Gerontology, June 1969.

Lowin, Aaron. "The Level of Performance on Managerial Style: An Experimental Object- Lesson in the Ambiguity of Correlational Data." Unpublished.

Lowin, Aaron. "Participative Decision-Making: A Model, Literature Critique, and Prescription for Research." Unpublished.

Lyons, Thomas F. Nursing Attitudes and Turnover: The Relation of Social-Psychological Variables to Turnover, Propensity to Leave, and Absenteeism Among Hospital Staff Nurses. Ames, Iowa: Iowa State University, Industrial Relations Center, April 1968.

MacKinney, Arthur C. "The Assessment of Performance Change: An Inductive Example," Organizational Behavior and Human Performance, Vol. 2, no. 1, February 1967.

MacKinney, Arthur C. "Conceptualizations of a Longitudinal Study of Manager Performance." Greensboro, N.C.: Creativity Research Institute of the Richardson Foundation, Inc., July 1967.

Maki, Dennis R. A Forecasting Model of Manpower Requirements in the Health Occupations. Ames, Iowa: Iowa State University, Industrial Relations Center, April 1968.

Mericle, Kenneth. "Technicians in Pharmacy." Master's thesis, 1969.

Nouri, Marilyn Ann. "Variables Related to Future Work Commitment of Non-Employed Mothers." Master's thesis, 1967.

Palomba, Catherine A. Occupational Projections for Iowa, 1975. Ames, Iowa: Iowa State University, Industrial Relations Center, February 1968.

Palomba, Neil A. "Evaluation of the Governor's Dropout Program," Iowa Business Digest, Vol. 40, no. 3, October 1968

Palomba, Neil A. "Experience Rating: A 30-Year Controversy," Labor Law Journal, January 1968.

Palomba, Neil A. Handbook for Estimation of Labor Supply by Use of a Community Survey. Des Moines: Iowa State Manpower Development Council and Iowa State University, Industrial Relations Center, February 1967.

Palomba, Neil A. "Stability and Real Economic Growth: An International Comparison," KY KLOS, to be published in late 1969.

Palomba, Neil A. "Strike Activity and Union Membership: An Empirical Approach," University of Washington Business Review, Winter 1969.

Palomba, Neil A. "Unemployment Compensation Program: Stabilizing or Destabilizing," Journal of Political Economy, February 1968.

Palomba, Neil A. and Jakubauskas, Edward B. Interdisciplinary Manpower Research. Proceedings of the First Annual Summer Manpower Research Institute. Ames, Iowa: Iowa State University, Industrial Relations Center, 1968.

Reilly, Anthony J., III. The Effects of Different Leadership Styles on Group Performance: A Field Experiment. Ames, Iowa: Iowa State University, Industrial Relations Center, December 1968.

Role of the Mass Media in the Racial Crisis: Proceedings of a Mass Media Seminar. Edited by Louis M. Thompson, Jr. Ames, Iowa: Iowa State University, Industrial Relations Center, April 1969.

Smith, Clifford E. "An Experiment in Student Participation," Journal of Engineering Education, Vol. 58, no. 2, October 1967.

Socknat, James A. Governor Harold E. Hughes of Iowa: A Study of the Exercise of Gubernatorial Power for Human Resources Development. Ames, Iowa: Iowa State University, Industrial Relations Center, January 1969.

Socknat, James A. "Proceedings of the Conference on Consumer Protection for the Poor." In process.

Taylor, Vienna. "OJT and the Older Worker." Master's thesis, 1968.

Trumm, Gerald. "Manager Style on Three Levels of Supervision." Master's thesis, 1968.

Zytowski, Donald G. "A Test of Criterion Group Sampling Error in Two Comparable Interest Inventories," Measurement and Evaluation in Guidance, Vol. 2, 1969.

Zytowski, Donald G. "Internal-External Control of Reinforcement and the Strong Vocational Interest Blank," Journal of Counseling Psychology, Vol. 14, 1967.

Zytowski, Donald G. "Relationships of Equivalent Scales on Three Interest Inventories," Personnel and Guidance Journal, Vol. 47, 1968.

Zytowski, Donald G. "Some Notes on the History of Vocational Counseling," Vocational Guidance Quarterly, Vol. 16, 1967.

Zytowski, Donald G. Vocational Behavior: Readings in Theory and Research. New York: Holt, Rhinehart, and Winston, Inc., August 1968.

Zytowski, Donald G. and Walsh, J. H. "Response Tendencies in the Strong Vocational Interest Blank: The Popular, the Rare, and the Socially Desirable," Journal of Applied Psychology, Vol. 51, 1967.

C. University of Maine

The State of Maine has been used as a laboratory for studying problems of manpower development and low income in a mature semirural economy. Within this scope, faculty and student research has focused on how well human resources are being utilized in Maine, especially among the fully employed. A pilot study on utilization was conducted in 1967, and in 1968, 819 prime working-age men in 12 Maine communities were surveyed. Migration, as it has influenced the State's labor force, has been examined in a number of studies. The 1968 survey explored a basic psychological variable related to manpower utilization, the need to cope with the environment.

Some center research has focused on the demand side of the labor market. State occupational projections to 1975 are being made under a contract with the Governor's office and the Maine Employment Security Commission. The methods communities have used to attract industry and the manpower experiences of the firms which have located in Maine are also being examined.

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Publications and major unpublished reports by faculty and students associated with the grant program are listed below. Information on availability of copies may be obtained by writing the Manpower Research Project, University of Maine, Orono, Maine 04473.

Clark, Barbara. "A Study of the Relation Between Occupational Knowledge and the Job Choice Realism of Non-College Bound High School Seniors." Master's thesis, 1969.

Maine's Migration: What We Know and What We Need to Know. Orono, Maine: University of Maine, Manpower Research Bulletin No. 1, 1968.

Management's Attitudes and Evaluations of Government Training Programs and Government Subsidization for Industrial Training. Orono, Maine: Manpower Research Bulletin No. 3, 1969.

Migration of Maine's University Graduates. Orono, Maine: University of Maine, Manpower Research Bulletin No. 2, 1968.

"Occupational Needs for the State of Maine to 1975." In process.

Ryckman, Richard M., et al. "Emotional Arousal as a Function of Perceived Locus of Control and Task Requirements," Journal of Social Psychology, in process.

Toothaker, Robert. "Management's Attitudes and Evaluations of Government Training Programs and Government Subsidization for Industrial Training." Master's thesis, 1968.

D. Norfolk State College

The principal subject of research at Norfolk State College has been manpower underutilization in the Tidewater-Hampton Roads area of Virginia. After a pilot study on underutilization, an area-wide study was conducted and data are being analyzed.

To parallel and complement a project at North Carolina State University's manpower center, an examination was undertaken of racial differences in jobseeking patterns of low-income individuals in the locality. Also underway is a study considering the implications for dockworkers of the increasing mechanization and containerization in the maritime industry.

Researchers recently undertook a study to help evaluate Norfolk's summer youth employment program. They will measure attitude changes among participants before and after their employment.

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Publications and major unpublished reports by faculty and students associated with the grant program are listed below. Information on availability of copies may be obtained by writing the Manpower Research Institute, Norfolk State College, 2401 Corprew Avenue, Norfolk,Va. 23504.

Bridging the Employment Gap - Strategies for Success and Causes, Consequences, and Cures for Labor Turnover Problems. Report of the Second Manpower Symposium held at Norfolk State College, Mar. 22, 1968. Norfolk, Va.: Norfolk State College, 1968.

Manpower--Optimum Utilization Needed in Tidewater. Report of the Third Manpower Symposium held at Norfolk State College, Apr. 11, 1969. Norfolk, Va.: Norfolk State College, 1969.

Manpower and Its Utilization. Report of the First Manpower Symposium held at Norfolk State College, Mar. 16, 1967. Norfolk, Va.: Norfolk State College, 1967.

"Manpower Utilization in Tidewater-Hampton Roads, Virginia." Norfolk, Va.: Norfolk State College, in process.

Manpower Utilization in Tidewater-Hampton Roads, Virginia: A Pilot Study. Norfolk, Va.: Norfolk State College, 1969.

E. North Carolina State University

As at Iowa State University, research at NCSU has been clustered in several areas.

1. Lifetime earnings and old age. Since 1966 continuing research has been conducted on existing lifetime patterns of leisure and work. Aspects explored include differences among occupations in the time patterns of income and work, synchronization of income with family "needs," and policies for adjusting the time path of income. Among the uses made of research results was testimony on economic growth and retirement incomes presented before the U.S. Senate's Special Committee on Aging. Also in this subject area was a case study on the economics of contributory retirement plans.

2. Labor force characteristics of peripheral workers. At the request of the Equal Employment Opportunity Commission, a study was carried out on emerging employment opportunities for Negroes in the textile industry of the Carolinas. Racial employment practices in Wake County, N.C., are being examined in cooperation with the Governor's Good Neighbor Council. After NCSU researchers found no significant differences between whites' and nonwhites' jobseeking methods in Raleigh, Norfolk State College undertook a parallel investigation in their locality.

A major continuing project has focused on the factors influencing teenagers' choices between school and labor force participation. One study tracing the school-to-work experiences of youth, particularly Negroes, in selected rural communities was completed largely under a Manpower Administration contract by researchers from various departments of NSCU and North Carolina Agricultural and Technical College at Greensboro.

A series of studies has been conducted on the employability of mothers receiving Aid to Families with Dependent Children. One such study, prepared for the President's Commission on Income Maintenance Programs, isolated variables influencing the work efforts of AFDC mothers in three States.

3. Human resources in international and regional development. Several studies have been conducted to test the hypothesis that America's foreign commercial policy is generally more protective of industries with high concentrations of unskilled labor than of other industries. Another project is investigating human resource development according to the pattern of industrialization in various regions of the United States.

Regarding health manpower, one project has been completed on the economic and social determinants of the availability of health services in various regions. Another study is relating an area's attractiveness as a place of practice and its training efforts to the influx of health practitioners. In addition, efforts are being made to construct a dynamic model of health manpower mobility.

4. Geographic migration. Several evaluations have been completed of a State worker relocation program. Currently a model is being constructed of interstate flows of college students.

5. The economics of education. Recently completed studies have compared rates of return from schooling and on-the-job training in the South, and considered various aspects of vocational education.

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Publications and major unpublished reports by faculty and students associated with the grant program are listed below. Information on availability of copies may be obtained by writing the Institutional Representative, Department of Economics, North Carolina State University, P.O. Box 5036, Raleigh, N.C. 27607.

Ball, David S. "Some Observations on Economic Activity in the South," Growth Prospects of the Piedmont Crescent. Raleigh, N.C.: North Carolina State University, The Agricultural Policy Institute, May 1968.

Ball, David S. "U.S. Effective Tariffs and Labor's Share," Journal of Political Economy, April 1967.

Ball, David S. and Wilson, Jack W. "Community Health Facilities and Services: The Manpower Dimensions," American Journal of Agricultural Economics, Vol. 50, no. 5, December 1968.

Bishop, C.E. and Mangum, F.A. "The Crescent's Human Resources," Growth Prospects of the Piedmont Crescent. Raleigh, N.C.: North Carolina State University, The Agricultural Policy Institute, May 1968.

Carroll, Adger B. and Ihnen, Loren A. "Costs and Returns for Two Years of Postsecondary Technical Schooling: A Pilot Study," Journal of Political Economy, December 1967.

Cooper, William Douglas. "The Economics of the North Carolina Program of Work Release." Ph. D. dissertation, 1968.

Coster, John K. and Ihnen, Loren A. "Program Evaluation," Review of Educational Research, October 1968.

Fairchild, Charles. "An Analysis of a Worker Relocation Program." Ph. D. dissertation, Duke University, 1969.

Fearn, Robert M. "Labor Force and School Participation of Teenagers." Ph. D. dissertation, The University of Chicago, 1968. Available from the University of Chicago Library, Reproduction No. T 16933.

Fearn, Robert M. "Low Income Negro Housing--A Conservative Suggestion," published under the title "New Housing for the Poor May be Cheaper than Old," The News and Observer. Raleigh, N.C.: June 16, 1968.

Fearn, Robert M. "The Peripheral Worker in the Affluent Society - A Comment," Proceedings of the Twentieth Annual Winter Meeting of the Industrial Relations Research Association. Washington: Dec. 28-29, 1967.

Fishelson, Gideon. "Returns to Human and Research Capital, United States Agriculture." Ph. D. dissertation, 1968.

Green, Christopher. "Negative Income Taxation as a Method of Income Maintenance," Rural Poverty in the United States, Washington: President's National Advisory Commission on Rural Poverty, May 1968.

Green, Christopher. Negative Taxes and the Poverty Problem. Washington: The Brookings Institution, 1967.

Hausman, Leonard. "The AFDC Amendments of 1967: Their Impact on the Capacity for Self-Support and the Employability of AFDC Family Heads," Proceedings of the 1968 Annual Spring Meeting of the Industrial Relations Research Association. Columbus, Ohio: May 2-3, 1968. Reprinted in the Labor Law Journal, Vol. 19, no. 8, August 1968.

Hausman, Leonard. "Potential for Work Among Welfare Parents." Washington: U.S. Department of Labor, in process.

Hausman, Leonard. "The Labor Market for School Leavers in Rural North Carolina." Unpublished background paper presented at the Conference on the Transition from School to Work, Princeton, N.J., May 9-10, 1968.

Hausman, Leonard. "Potential for Financial Self-Support among AFDC and AFDC-UP Recipients," Southern Economic Journal, July 1969.

Hausman, Leonard. "The Welfare System as a Manpower and Rehabilitation System," Public and Private Manpower Policies. New York: Harper & Row, in process.

Hausman, Leonard. "The Welfare Tax Rate: Its Relationship to the Employability and 'Self-Supportability' of AFDC Recipients," Trans-action: Social Science and Modern Society, Vol. 6, no.6, April 1969.

Hausman, Leonard, and Green, Christopher. "Unemployment among Black and White School Leavers in a Two-County Rural Area of North Carolina." Unpublished paper presented to the annual meeting of the Southern Economic Association, Washington, D.C., Nov. 7-9, 1968.

Hoover, Dale M. "Review of the Measurement of Underemployment Study by B.V. Shah," Appendix B (Consultant's Report) in B.V. Shah, A Developmental Study for an Index of Underemployment, Technical Report No. 2. Durham, N.C.: Research Triangle Institute, June 1968.

Johnson, Paul R. "Labor Mobility: Some Costs and Returns," Rural Poverty in the United States. Washington: President's National Advisory Commission on Rural Poverty, May 1968.

Johnson, Thomas. "Returns from Schooling and On-the-Job Training." Ph. D. dissertation, 1969.

Kreps, Juanita M. "The Impact of Economic Growth on Retirement Incomes," Senate Hearings. Washington: 90th Cong., 1st sess., U.S. Senate, Special Committee on Aging, 1967.

Kreps, Juanita M. "Lifetime Tradeoffs Between Work and Play," Proceedings of the Twenty-First Annual Winter Meeting of the Industrial Relations Research Association. Chicago: Dec. 29-30, 1968.

Kreps, Juanita M. and Pursell, Donald D. "Lifetime Earnings and Income in Old Age," Old Age Income Assurance, Pts. II and IV. Washington: 90th Cong., 1st sess., Joint Economic Committee, Subcommittee on Fiscal Policy, December 1967.

Lianos, Theodore P. "Educational Selectivity of Migration." Master's thesis, 1967.

Lianos, Theodore P. "Greek Labor Migration to Western Europe." Ph. D. dissertation, June 1969.

Lianos, Theodore P. "South-Nonsouth Migration, 1955-60," Mississippi Valley Journal of Economics and Business, in process.

Lianos, Theodore P. "Stocks and Flows in Migration," Canadian Journal of Agricultural Economics, Vol. XVI, no. 1, 1968.

Maddox, James G. The Advancing South: Manpower Prospects and Problems. New York: The Twentieth Century Fund, 1967.

Maddox, James G. "The Growing Southern Economy," The Future South and Higher Education. Atlanta: Southern Regional Education Board, 1968.

Osburn, Donald D. Negro Employment in the Textile Industries of North and South Carolina. Washington: Equal Employment Opportunity Commission, Research Report 1966-10, Nov. 21,1966.

Osburn, Donald D. "Returns to Investment in Human Migration." Ph. D. dissertation, 1966.

Pace, William Vernon. "Racial Differences in Job Search Patterns." Master's thesis, 1967.

The People Left Behind. Washington: U.S. Government Printing Office, President's National Advisory Commission on Rural Poverty, September 1967. Contributions by C.E. Bishop, E. Walton Jones, and C. Green.

Pursell, Donald. "Minimum Wage Regulation under the South African Wage Act." Ph. D. dissertation, Duke University, 1968.

Pursell, Donald. "Bantu Real Wages and Employment Opportunities," South African Journal of Economics, Vol. 36, 1968.

Pursell, Donald. "The Impact of the South African Wage Board on Skilled-Unskilled Wage Differentials," East African Economic Review, in process.

Robbins, Richard D. "An Evaluation of Publicly-Supported Mobility of Low Income Rural Residents." Master's thesis, 1967.

Robinson, Howard F., Harris, Benjamin W., and Johnson, Paul R. Employment Adjustments in Two Growing Labor Markets. Raleigh, N.C.: North Carolina State University, Department of Economics Research Report No. 7, 1968.

Rogers, Charles H., Hausman, Leonard J., Green, Christopher, et al. "Generic Bases of Teenage Unemployment: A Preliminary Investigation." Raleigh, N.C.: Center for Occupational Education, expected in 1969.

F. Oklahoma State University

Oklahoma's research has considered primarily the manpower problems relevant to its location. A major concern in the last 3 years has been occupational education beyond the high school in Oklahoma. Based on a statewide analysis of technical training programs and the mobility of their graduates, the researchers planned a system for such education as part of a manpower development program for the State. As a side benefit of this study, major employers were brought together with both researchers and personnel at training institutions for the first time.

In a further effort to match vocational education with industry needs, an occupational training information system is being developed under a Manpower Administration contract. The system will provide continuous information to manpower planners to facilitate adjustments of State and local occupational education programs. In addition to faculty research, three doctoral dissertations and seven master's theses explore aspects of this problem.

Two studies have dealt with labor force participation of residents in the Ozark area of northeast Oklahoma. Based on the manpower center's analysis of Ozark labor force characteristics, the Northeast Oklahoma Community Development Corp. has requested further research on the most effective ways of motivating, recruiting, and utilizing local manpower.

Concern with the State's economy and minority population is reflected in a current study of sources of recent economic growth, and in two evaluations of the training offered American Indians through the U.S. Bureau of Indian Affairs. (One of the latter was completed under a Manpower Administration dissertation grant.) Considerable research was also performed in conjunction with a national conference on rural-urban migration (see section on Extension Activities for details).

On health manpower, a current project is analyzing the potential of discharged military corpsmen for use in civilian health occupations. Another project examined utilization of female registered nurses.

Jobseeking is being examined in two projects: (1) An experimental program under which selected registrants at public employment service offices are given supplemental labor market information (sponsored under a Manpower Administration contract); and (2) a comparison of labor market information, jobseeking behavior, and socioeconomic mobility of Negro and white college graduates.

Finally, a series of international manpower studies has been undertaken. A comparison has been made of the manpower environments confronting firms in Western Europe and the United States. Active studies include an assessment of the relevance of training in the United States for graduate students who return to Latin America.

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Publications and major unpublished reports by faculty and students associated with the grant program are listed below. Information on availability of copies may be obtained by writing the Manpower Research and Training Center, Oklahoma State University, Stillwater, Okla. 74074.

Allan, Roger B. "Conformity and Compliance as a Function of Social Norm Arbitrariness." Master's thesis, 1968.

Anderson, David A. "The Adaptation of PERT for Coordinating Interdisciplinary Manpower Research in a University Setting -- A Descriptive Study." Master's thesis, 1968.

Blume, Paul R. "An Evaluation of Institutional Vocational Training Received by American Indians Through the Muskogee, Oklahoma, Area Office of the Bureau of Indian Affairs." Ph. D. dissertation, 1968.

Braden, Paul V. Manpower Requirements and Occupational Programs in Oklahoma. Stillwater, Okla.: Oklahoma State University, The Research Foundation, Jan. 31, 1969.

Braden, Paul V. "The Need for an Occupational Training Information System," The Journal of Technology, Vol. VII, no. 2, Fall 1968.

Braden, Paul V., Harris, James L., Paul, Krishan K. "Interfacing Demand and Supply of Technical Manpower in Oklahoma," The Journal of Technology, Vol. VIII, no. 1, Spring 1969.

Dupree, Robert L. "A Cost-Benefit Study of Post-High School Technical Education in Oklahoma." Master's thesis, 1968.

Fine, Sidney A. Challenges in Developing a Manpower Program. Stillwater, Okla.: Oklahoma State University, Manpower Research and Training Center, 1967.

Freed, Robert V. "The Development of Post-High School Technical-Vocational Education in Oklahoma." Master's thesis, 1968.

Gambrell, Melvin B., Jr. "An Assessment of the President's Youth Opportunity Campaign in Relation to Attitude Change Toward Education and Earning a Living." Master's thesis, 1968.

Grimes, A. Ray. Economic and Social Characteristics of the Oklahoma City Air Materiel Area. Oklahoma City, Okla.: U.S. Air Force, Oklahoma City Air Materiel Area, August 1968.

Hardt, Howard P. "Output of Engineering and Physical Science-Related Technicians from Oklahoma Schools, 1960-1967." Master's thesis, 1968.

Martin, Donna K. "An Analysis of Selected Factors in the Utilization of Female Registered Nurses in Oklahoma." Master's thesis, 1969.

Noyes, John S. "The Clerical Labor Force and Labor Force Area of the Manned Spacecraft Center National Aeronautics and Space Administration." Master's thesis, 1968.

Poole, Richard W. and Shearer, John C. Joint Testimony on S. 15, Rural Job Development Act of 1969. Washington: 91st Cong., 1st sess., U.S. Senate, Finance Committee, May 22, 1969.

Puckett, Howard L. "A Managerial Action Program for the Economic Development of Adair County, Oklahoma." Master's thesis, 1968.

Roney, Maurice W. and Braden, Paul V. Occupational Education Beyond the High School in Oklahoma. Stillwater, Okla.: Oklahoma State University, The Research Foundation, January 1968.

Roney, Maurice W. and Braden, Paul V. Occupational Education Beyond the High School in Oklahoma, Summary Report. Stillwater, Okla.: Oklahoma State University, The Research Foundatior, January, 1968.

The Rural to Urban Population Shift -- A National Problem. Proceedings of a conference cosponsored by the U.S. Senate Committee on Government Operations and the Ford Foundation. Washington: U.S. Government Printing Office, 1968.

Sandmeyer, Robert L. and Warner, Larkin B. The Determinants of Labor Force Participation Rates, With Special Reference to the Ozark Low-Income Area. Stillwater, Okla.: Oklahoma State University, The Research Foundation, April 1968.

Sandmeyer, Robert L. and Warner, Larkin B. "Methodological Issues in the Study of Labor Force Participation Rates," The Rocky Mountain Social Science Journal, Vol. IV, no. 2, October 1967.

Selby, David R. "A Labor Market Survey and Analysis of Oklahoma State University Undergraduates." Master's thesis, 1968.

Shearer, John C. "An Experimental Program in Manpower Research and Training," Proceedings of the Fourteenth Annual Conference of the Mid-Continent Research and Development Council held in Stillwater, Okla., Sept. 25-26, 1967. Stillwater, Okla.: Oklahoma State University, 1968.

Shearer, John C. "The Foreign Student 'Brain Drain,'" The Brain Drain of Scientists, Engineers, and Physicians from the Developing Countries into the United States. Washington: 90th Cong., 2nd sess., U.S. House of Representatives, Committee on Government Operations Subcommittee, Jan. 23, 1968.

Shearer, John C. "High-Level Human Resources," Manpower and Employment Policies for Developing Countries. Washington: U.S. Department of State, Agency for International Development, 1967.

Shearer, John C. "Industrial Relations of American Corporations Abroad," International Labor. Edited by Solomon Barkin et al, New York: Harper & Row, 1967.

Shearer, John C. "The Manpower Environments Confronting Firms in Western Europe," European Labor and the American Corporation. New York: Bureau of National Affairs, expected in 1969.

Shearer, John C. and Rafael, Isaza B. Algunas Caracteristicas de la Fuerza de Trabajo de Colombia. Bogota, Colombia: Organization of American States, 1968.

Shearer, John C. and Rafael, Isaza B. Employment and Unemployment Trends in Colombia. Washington: Pan American Union, Department of Social Affairs, March 1969.

Stevens, David W. Money Isn't Enough: Effects of Unearned Income on the Contributions of Indians to Community Economic Development. Stillwater, Okla.: Oklahoma State University, Manpower Research and Training Center, 1968.

G. Temple University

Research projects at Temple have been in the areas of labor force behavior, collective bargaining, income maintenance programs, urban manpower problems, industry studies, and international manpower problems.

Completed labor force studies include the following: (1) An exploration of trends in the size and composition of the American labor force; (2) development of annual estimates of the resident labor force by county in Pennsylvania for 1940-63, and projected for 1970, 1975, and 1980; (3) identification of characteristics of labor force nonparticipants among prime-age males in Philadelphia (under a separate Manpower Administration grant); and (4) investigation of the role of personal income tax policies in manpower relocation.

Considerable research was conducted in connection with a seminar series on collective bargaining (see section on Extension Activities for details). Labor relations were examined in the performing arts, hospitals, agriculture, public education, and police and firefighting. Related studies explore the impact of school decentralization on teacher bargaining and the current status of collective bargaining in Federal, State, and local governments.

Social welfare programs have been considered in various aspects. One researcher has summarized several socioeconomic problems and policy issues and explored some potential contributions social insurance plans might make to the general welfare. Another investigator is evaluating the employability of welfare recipients, including mothers receiving Aid to Families with Dependent Children.

Case studies underway on the Philadelphia urban area explore: (1) How employment in geographic sectors is affected by the nature of the firms which enter, leave, and relocate within the city (under a Manpower Administration contract); and (2) food purchasing behavior of 30 low-income families.

Industry studies have focused on manpower in banking, impact on the community of several textile mill closings, and geographic distribution of hospital and other health services (under support from the Science and Engineering Foundation of Pennsylvania and the U.S. Department of Health, Education, and Welfare). International manpower studies include an investigation of the potential role of social security in a nation's economic development.

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Publications and major unpublished reports by faculty and students associated with the grant program are listed below. Information on availability of copies may be obtained by writing the Manpower Research Institutional Grant Program, Temple University, Philadelphia, Pa. 19122.

Dixon, Donald F. "Do the Inner-City Poor Pay More for Food?," Economics and Business Bulletin, Spring 1968.

Drought, Neal E. The Mental Retardate as a Manpower Resource. Printed at Temple in 1968 for limited distribution and currently being expanded for publication in book form.

Harms, Louis T. and James, Rosella. Manpower in Pennsylvania. Harrisburg: Department of Community Affairs, 1967.

Harms, Louis T. "Technological Change and Manpower in Banking." The findings of this report will appear as two chapters in Fischer, Gerald C., et al. The Future of Banking. Philadelphia: Robert Morris Asso., expected in late 1969.

Koziara, Karen. "Non-Participation of Males in the Philadelphia Labor Force." Report to the U.S. Department of Labor, 1969. Results to be published.

McLennan, Kenneth. "The Economic Basis of Multilateral Bargaining in the Public Sector," ISR Journal, Summer 1969.

McLennan, Kenneth. "The Impact of Technological Change on Manpower Requirements," Proceedings of a Conference on Occupational Analysis. Edited by E. Rosenbaum. Lehigh University, 1968.

McLennan, Kenneth. "Leadership and Motivation in Manpower Management." Paper delivered to Administrative Management Association seminar at Drexel Institute of Technology, September 1968.

McLennan, Kenneth. "Relocation Policy and Geographic Mobility of Manpower." Delivered at the Middle Atlantic Manpower Advisory Committee Meeting, Philadelphia, Nov. 14, 1968.

McLennan, Kenneth. "Teacher Strikes and Dispute Settlement Policy," New York Law Forum, 1968.

McLennan, Kenneth. "Teacher Strikes: Their Impact and Incidence," Management of Personnel Quarterly, 1969.

Moskow, Michael H. "Labor Relations in the Performing Arts." To be published by the Associated Councils for the Arts in 1969.

Moskow, Michael H., Loewenberg, J. Joseph, and Koziara, Edward C. "Collective Bargaining in Public Employment." New York: Random House, to be published in 1970.

Moskow, Michael H. and McLennan, Kenneth. "Multilateral Bargaining in the Public Sector," Proceedings of the Twenty-First Annual Winter Meeting of the Industrial Relations Research Association. Chicago: Dec. 29-30, 1968.

Moskow, Michael H. and McLennan, Kenneth. "Teacher Negotiations and School Decentralization," The Community School. Edited by Henry Levin. Washington: The Brookings Institution, to be published in 1969.

Quinn, Francis X. Population Ethics. Washington: Corpus Books, 1968.

Raphaelson, Arnold. "Geographical Distribution of Health Services and Manpower." Paper delivered to the American Risk and Insurance Association Meetings in Cincinnati, August 1969.

Raphaelson, Arnold, et al. A Study of Textile Mill Closings in Selected New England Communities. Orono, Maine: University of Maine, Nov. 10, 1966.

Rohrlich, George F. "Human Rights, Human Resources and Social Progress." In process.

Rohrlich, George F. "The Place of Social Insurance in the Pursuit of the General Welfare," Journal of Risk and Insurance, to be published in 1969.

Rohrlich, George F. "Social Economics: Agenda for Americans." To be published.

Rohrlich, George F. "Social Security and Economic Development: Pathways for Developing Nations." Chicago: University of Chicago Press, to be published in 1970.

Wolfbein, Seymour L. The Emerging Labor Force. Washington: Chamber of Commerce of the United States, 1968.

Wolfbein, Seymour L. (ed.). "Emerging Sectors of Collective Bargaining." New York: Harper & Row, to be published in 1969 or 1970.

Wolfbein, Seymour L. Occupational Information: A Career Guidance View. New York: Random House, 1968.

IV. TRAINING

A. Degree Programs and Curriculums

Schools receiving institutional grants have integrated manpower studies into their existing degree programs largely by creating areas of concentration in manpower for master's or Ph.D. degrees or allowing students in related disciplines to take manpower courses for credit toward their degrees. A specific manpower degree was established at only one school, Iowa State University, in the form of an interdisciplinary master's degree program in industrial relations.

Curriculum changes have ranged from the introduction of a single manpower seminar to the addition of 11 courses. The detailed descriptions which follow provide a picture of the training systems established at each participating school.

Atlanta University

A manpower specialty, requiring completion of three manpower-related courses, was instituted as part of the master's degree programs in business administration, sociology, and social work. Manpower center personnel recently proposed to the university a more extensive interweaving of the manpower and business administration curriculums.

Initially, the manpower center superimposed a manpower orientation on two business administration courses. By the 1968-69 academic year, the center had adopted more existing courses and created new ones. They offered eight manpower-related courses, such as an introduction to manpower problems, industrial sociology, the sociology of occupations, labor problems and industrial relations, personnel management, and administrative practices and human relations. Course enrollment ranged from five to 166.

To supplement this curriculum, a noncredit course in research methodology was offered. In 1969 a weekly lecture and discussion series was instituted to enable students to discuss their own research and to familiarize them with manpower planning and policy as presented by speakers from different levels of government and private industry. In addition, students did field work and provided other assistance to professors performing research.

Iowa State University

An interdisciplinary master's degree program in industrial relations was instituted in 1966, and a concentration in labor and manpower economics was recently established for the Ph.D. program

in economics. Students earning master's degrees in economics, psychology, sociology, government, and industrial engineering, as well as those earning Ph.D.'s in the first three fields, may pursue manpower studies for credit.

A graduate and an undergraduate course in manpower economics have been given during each of the last 3 years, with average enrollment of eight and 34, respectively. A course on manpower utilization in developing nations will be offered in the 1970-71 academic year. To supplement these courses and student research activities, nearly 20 manpower experts from government, industry, and other schools have spoken to faculty and student groups during the last 3 years.

University of Maine

An interdisciplinary manpower research seminar, introduced in 1966, has acquainted students with manpower problems and initiated them into manpower research. This two-semester workshop has attracted graduate students from psychology, sociology, education, economics, and business administration, with enrollment averaging nine per year. There is no manpower degree program as such.

Norfolk State College

As at the University of Maine, a two-semester seminar introduced undergraduate students in various disciplines to manpower problems and research. Presentations were made both by faculty members and representatives of management, labor, and Community Action agencies. The seminar enrolled an average of 10 students per year and counted toward degrees in manpower-related disciplines.

North Carolina State University

Labor economics and human resource development has been established as a new field of specialization for a Ph.D. in economics. This specialization requires enrollment in two manpower-related seminars--in human capital and in labor economics and manpower problems--and participation in the research workshop, where professors and graduate students discuss inhouse research plans and results and visiting manpower experts make presentations. Seminar enrollment has averaged seven students, but workshop sessions have consistently drawn larger numbers.

Oklahoma State University

Manpower Fellows, who received substantial financial support, were required to complete a number of manpower courses as well as their master's degree work in economics, psychology, sociology, or technical education. In addition, they served research internships

on major projects quarter time during the academic year and full time during the summer between their 2 years of master's degree work. Supplementing their classroom and research experience were 13 visiting lecturers and a series of field trips to research project sites.

Temple University

A concentration in manpower studies was instituted in 1966 for both the master's degree and the Ph.D. in economics. Under the Master of Business Administration program, students may focus on industrial or labor relations, or (due to the recent efforts of center faculty members) on health administration.

Eleven graduate manpower courses were added to the economics curriculum during the last 3 years. They cover such subjects as social, urban, and regional economics; employment, unemployment, and public policy; the economics of education; income distribution and public policy; problems of the ghetto; economic development of small regions; and technological change. Five manpower-related courses have been introduced in the Department of Management: Public policy and labor; collective bargaining in contemporary society; American labor unions; labor relations in public employment; and comparative labor movements. Total enrollment in the above courses has averaged 126 students per semester.

In conjunction with this curriculum, manpower experts have made presentations at monthly luncheons to graduate students, faculty members, and representatives from business, government, and other schools.

B. Faculty Members

In the last 3 years, 110 faculty members have been involved in the manpower center programs at schools participating in the Institutional Grant Program. They represent every discipline related to the manpower field, as indicated in table 1.

Direct faculty participation has entailed receiving financial support derived from grant-related funds for performing manpower research or teaching manpower-related courses; receiving released time for such activities; or having been assigned student research assistants who are supported by grant funds. Indirect faculty participation was defined as performing manpower research unsupported by grant funds; advising the grant program or students earning manpower-related degrees; or participating in seminars arranged in conjunction with the grant program.

Table 1. Faculty Members Participating in Manpower Center Programs, July 1966-June 1969

School	Direct participants 1/			Indirect participants 2/	
	Cumulative total	Total in June 1969	Disciplines represented 3/	Cumulative total	Disciplines represented 3/
Atlanta University	12	9	2,3,15		
Iowa State University	17	11	3,8,12,13,15		
University of Maine	7	4	3,10,15		
Norfolk State College	14	7	2,3,5,6,7,13,14,15		
North Carolina State University	12	11	3	7	3
Oklahoma State University	14	8	3,4,15,16	5	13,15
Temple University	34	34	1,2,3,4,9,10 11,13,15		
Totals	110	84		12	

1/ Faculty members receiving financial support derived from grant-related funds for performing manpower research or teaching manpower-related courses; receiving released time for such activities; or having been assigned student research assistants who are supported by grant funds.

2/ Faculty members (excluding the above) who advise the grant program or students earning manpower-related degrees; who participate in seminars arranged in conjunction with the grant program; or who perform manpower research without support from grant funds.

3/ Disciplines are coded as follows: 1-Anthropology; 2-Business Administration; 3-Economics; 4-Education; 5-Geography; 6-History; 7-Industrial Education; 8-Industrial Engineering; 9-Insurance; 10-Management; 11-Marketing; 12-Political Science; 13-Psychology; 14-Social Work; 15-Sociology; and 16-Technical Education.

C. Financial Support for Students

In order to attract and retain high caliber students, all the manpower centers have extended financial aid derived from their grant funds. The programs vary in types of aid, amounts, and number of students covered each year, as seen in table 2.

To June 1969, almost 150 students had received substantial financial support based on grant funds. Of these, 46 had earned master's degrees and 13 had completed bachelor's degrees. (See table 3.) Although a few of the nongraduating students had dropped out, most were still pursuing their degrees. A number of Ph.D. candidates were close to completing their requirements.

In addition to those receiving financial aid, 400 other students have participated in the manpower centers' programs. They have taken manpower-related courses, enrolled in a manpower degree curriculum, concentrated on manpower within other degree programs, or worked occasionally on center staff research projects as assistants, interviewers, statisticians, etc. As indicated in table 4, "indirect" program participants have earned two bachelor's, 40 master's, and 11 Ph.D. degrees.

Table 2. Students Receiving Substantial Financial Support Derived from the Institutional Grants 1/ July 1966-June 1969

School	Fellowships to degree candidates		Amount of fellowship	Assistantships to degree candidates 2/			Amount of assistantship
	Master's	Ph.D.'s		Bachelor's	Master's	Ph.D.'s	
Atlanta University	39		$1,000 or 2,000/yr.				
Iowa State University					16	3	$3,360/yr.
University of Maine					11	2	$2,200-2,400/yr.
Norfolk State College				22			$1.50/hr.
North Carolina State University	1	1	$3,500-4,000/yr.		3	2	$2,700-3,600/yr.
Oklahoma State University	26		$3,000/yr.				
Temple University	1	10	$2,400-3,000/yr.		1	9	$2,400-2,800/yr.
Totals	67	11		22	31	16	

1/ Students receiving awards in more than 1 year are counted only once.

2/ Students receiving both fellowships and assistantships are counted under the former, since they are usually larger awards.

Table 3. Degrees Awarded to and Postgraduate Activities of Students Receiving Substantial Financial Support Derived from the Institutional Grants, July 1966-June 1969

School	Degrees awarded to recipients			Postgraduate activities 1/		
	Bachelor's	Master's	Ph.D.'s	Further education	Teaching	Other manpower-related work
Atlanta University		24		1	2	9
Iowa State University		6		1		2
University of Maine		5		3	1	
Norfolk State College	13			4		5
North Carolina State University		1				
Oklahoma State University		9		1	1	5
Temple University		1				
Totals	13	46		10	4	21

1/ To the extent known by the participating schools.

Table 4. Students Indirectly Associated with Manpower Center Programs 1/
July 1966-June 1969

School	Degree candidates			Degrees awarded to participants		
	Bachelor's	Master's	Ph.D.'s	Bachelor's	Master's	Ph.D.'s
Atlanta University		284			(2/)	
Iowa State University		18	10		7	4
University of Maine		7	2		2	
Norfolk State College	6			2		
North Carolina State University		2	12		1	7
Oklahoma State University		13	15		8	
Temple University		27			22	
Totals	6	351	39	2	3/ 40	11

1/ Included are those students who have taken manpower-related courses, enrolled in a manpower curriculum, concentrated on manpower within other degree programs, or worked occasionally on center staff research projects as assistants, interviewers, statisticians, etc.

2/ Information not available.

3/ Excludes Atlanta University.

V. EXTENSION ACTIVITIES

Each institutional grant recipient has benefited those outside its program through extension activities. In general, such contributions have consisted of conferences and symposia--organized and/or attended by Institutional Grant Program participants--and consultations with manpower program planners and administrators at the local, State, and national levels.

Two universities have made exceptional efforts to involve specific groups of schools in their program activities. In 1968 Atlanta University first brought together faculty members from 24 predominantly Negro colleges in the Southeast to explore regional manpower problems. Iowa State University began in 1966 to involve colleges in the six-State Great Plains region in its manpower program. To date, 69 colleges, universities, and associations of higher education have been receiving Iowa's manpower research publications, invitations to their conferences, and occasional visits from their center staff members. Iowa also set up a committee of the presidents of several nearby colleges to advise them on regional activities appropriate to their program.

Twenty-one conferences conducted by five of the recipient schools have involved hundreds of persons from all over the country in discussions of major manpower problems. Outlined in table 5, these conferences reflect each school's major areas of research interest.

In addition to organizing and participating in their own conferences, manpower center staff have attended numerous other conferences. They have often presented research papers there, many of which have been published (see the bibliographies for each participating school in the section on Research).

Since the beginning of the Institutional Grant Program, manpower center staff have brought their knowledge of manpower into the sphere of decisionmakers and action agencies. On the national level, staff members have presented testimony before Congressional committees and worked with the National Manpower Advisory Committee. Staff members have both consulted with Regional Manpower Advisory Committees and been members of their respective committees.

Center personnel have contributed significantly to State manpower programs. Either as consultants or members of committees, Iowa State University, Oklahoma State University, and Temple University staff members, in particular, have contributed to such areas as planning a comprehensive program for health manpower, matching job vacancies and technical education curriculums, and organizing school districts in their States.

Table 5. Conferences Organized by Manpower Center Staff
July 1966-June 1969

School	Title and time	Participants	Other information
Atlanta University	Regional Manpower Conference Apr. 19-20, 1968	Faculty from 24 predominantly Negro colleges and representatives of government agencies, private industry, and community organizations.	
Iowa State University	Human Resource Development Conference Oct. 13-14, 1966	Presidents and manpower researchers from regional colleges, guidance counselors and superintendents from public schools, and representatives from manpower-related associations.	Cosponsored by the Iowa State Manpower Development Council and Iowa State University's Cooperative Extension Service. Proceedings published by the Iowa State University Press.
	Consumer Education and Protection for the Poor May 9-10, 1968	State officials who deal with the poor and scholars in manpower.	Cosponsored by Iowa State University's Cooperative Extension Service. Proceedings to be published.
	Conference on Communications Media and Problems of the Urban Ghetto	Newsmen and manpower specialists.	In cooperation with Iowa State University's Department of Journalism. Proceedings published by the Industrial Relations Center, Iowa State University.

Table 5. Conferences Organized by Manpower Center Staff
July 1966-June 1969--Continued

School	Title and time	Participants	Other information
Iowa State University (Continued)	Comprehensive Health Manpower Conference Mar. 13-14, 1968	State officials in health services and educators in the field.	Cosponsored by the University of Iowa. Report published by the Industrial Relations Center, Iowa State University.
	Personnel and Industrial Relations Conference Mar. 4-5, 1969	Practitioners in the field and scholars in manpower.	Cosponsored by Iowa State University's Engineering Management Institute.
	First Annual Summer Manpower Research Institute June 12-16, 1967	Faculty from colleges and universities in the Great Plains region, and other manpower specialists.	Proceedings published by the Industrial Relations Center, Iowa State University.
	Second Annual Summer Manpower Research Institute June 10-14, 1968	Faculty members and others, as above.	Proceedings to be published.
	Third Annual Summer Manpower Research Institute June 2-6, 1969	Faculty members and others, as above.	Proceedings to be published.
Norfolk State College	Manpower and Its Utilization Mar. 16, 1967	Community leaders representing Government, private industry, and labor unions, and manpower specialists.	Proceedings published by Norfolk State College.

Table 5. Conferences Organized by Manpower Center Staff
July 1966-June 1969--Continued

School	Title and time	Participants	Other information
Norfolk State College (Continued)	Bridging the Employment Gap--Strategies for Success Mar. 22, 1968	Community leaders and specialists, as above.	Proceedings published by Norfolk State College.
	Manpower--Optimum Utilization Needed in Tidewater Apr. 11, 1969	Community leaders and specialists, as above.	Proceedings published by Norfolk State College.
Oklahoma State University	The Rural to Urban Population Shift: A National Problem May 17-18, 1968	700 scholars and public officials from throughout the Nation.	Cosponsored by the Ford Foundation and Senator Fred R. Harris, Chairman, Subcommittee on Government Research. Proceedings published by the U.S. Government Printing Office.
Temple University	Five Seminars on Emerging Sectors of Collective Bargaining December 1967-April 1968	Persons involved in the performing arts, hospitals, agriculture, public education, and police and fire-fighting.	Proceedings to be published.

Table 5. Conferences Organized by Manpower Center Staff
July 1966-June 1969--Continued

School	Title and time	Participants	Other information
Temple University (Continued)	Five Seminars on the Structure of Scientific Revolutions and Economic Analysis February-March 1968	Students and faculty at Temple and other universities.	Proceedings to be published.
	The Evolving Role of Women in the World of Work Mar. 7, 1968	Women in various professions.	Proceedings to be published.
	The Mentally Retarded as a Manpower Resource Mar. 21, 1968	Persons from the cooperating organizations and Temple University faculty.	In cooperation with the Industrial Resources Project of the Social and Rehabilitation Service (U.S.Department of HEW) and the Jewish Employment and Vocational Service. The paper under discussion, by Neal Drought, The Mental Retardate as a Manpower Resource, was published.
	Urban Entrepreneurship Opportunities Conference Jan. 23, 1969	Bankers, businessmen, ghetto residents, and faculty members.	

Table 5. Conferences Organized by Manpower Center Staff
July 1966-June 1969--Continued

School	Title and time	Participants	Other information
Temple University (Continued)	Social Economics: Agenda for Americans (3 meetings) January-March 1969	Faculty members and public officials.	Proceedings to be published.
	Developing Community Responsibility Feb. 11-12, 1969	Religious, business, labor, government, and educational leaders.	Proceedings to be published.
	Human Rights, Human Resources, and Social Progress May 8-10, 1969	Persons involved with the International Labour Organization and faculty members.	Proceedings to be published.

Extension activities on the local level have been profuse. Center staff at the University of Maine, Norfolk State College, North Carolina State University, and Temple University have been advising local agencies of the following Federal programs: Model Cities; the Concentrated Employment Program; and the Cooperative Area Manpower Planning System.

Temple University personnel have prepared population projections for local school districts, and Iowa State University has developed a method for evaluating labor supply problems in multicounty areas. One Norfolk State College researcher is helping the local Better Business Bureau examine price discrimination by chain stores in low-income areas.

The original institutional grants are continuing into a fourth year at their original level and will be awarded at half this level during their fifth and final year. In these concluding years, the manpower programs established by the participating schools are expected to corroborate further their characterization by Eli Ginzberg, chairman of the National Manpower Advisory Committee, as "one of the great successes of the Department of Labor's modest research effort .... These funds, together with contract money, have helped to place the field of manpower in a more prominent position in many universities and have helped to attract and retain personnel in this burgeoning field." 2/

2/ Federal Manpower Programs--An Evaluation by the National Manpower Advisory Committee (Washington: U.S. Department of Labor and U.S. Department of Health, Education, and Welfare, 1968), p. 11.

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